AMERITECH CENTRAL OFFICE INTERCONNECTION
CENTRAL OFFICE BUILDOUT
Per Additional 100 Sq. Ft.

TOTAL INVESTMENT	$9,686.01
DEPRECIATION	$225.68
COST OF MONEY	$833.97
INCOME TAX	$395.19
MAINTENANCE	$300.27
AD VALOREM TAX	$84.27
TOTAL ANNUALIZED COST	$1,839.38
NET PRESENT VALUE (P/A 11.5% OVER 7 YRS.)	$9,510.13
GROSS RECEIPTS TAX	$395.20
TOTAL CENTRAL OFFICE BUILD OUT (COBO) COST	$9,905.33
COBO CHARGE	$15,691.71
DIRECT UNIT COST TO UNIT INVESTMENT RATIO	1.02
DIRECT UNIT COST TO UNIT PRICE RATIO	0.63

gross receipts tax wtd. factor			025185				
			AMERITECH				EXHIBIT 4
				ACOI			Page 2
CENTRAL OFFICE BUILDOUT PER 100 SQ. FT.							
TOTAL INVESTMENT						$24,082.95	
DEPRECIATION						561.13	
COST OF MONEY						2073.54	
INCOME TAX						982.58	
MAINTENANCE						746.57	
AD VALOREM TAX						209.52	
TOTAL ANNUALIZED COST						4573.34	
NET PRESENT VALUE (P/A 11.5% OVER 7 YRS.)						23645.49	
Cost to Rate Factor						$1.65	
GROSS RECEIPTS TAX						$982.59	
TOTAL COBO COSTS						$24,628.08	
COBO CHARGE						$39,015.06	
DIRECT COST TO DIRECT INVESTMENT RATIO						1.02	
DIRECT COST TO CHARGE RATIO						0.6300	
CHARGE TO DIRECT COST RATIO						1.5800	

Item:									
Acct:	10C								
A. INVESTMENT									
1	1993 Investment		$1.00						
2	1996 TPI Index		100						
3	1993 TPI Index		100						
4	TPI Factor	(L2 / L3)	1.0000						
5	1996 Investment	(L1 * L4)	$1.00						
			IL	IN	MI	OH	WI		
B. ANNUAL CHARGE FACTORS									
	Depreciation		0.0233	0.0233	0.0233	0.0233	0.0233		
	Cost of Money		0.0859	0.0861	0.0863	0.0863	0.0859		
	Income Tax		0.0454	0.0421	0.0376	0.0372	0.0461		
	Maintenance		0.0298	0.0231	0.0372	0.0307	0.0273		
	Ad Valorem Tax		0.0171	0.0057	0.0097	0.0059	0.0000		
C. JURISDICTION WEIGHTING			0.22	0.12	0.27	0.27	0.12		Ameritech
									Weighted
D. WEIGHTED ANNUAL CHARGE FACTORS									Average
	Depreciation		0.0051	0.0028	0.0063	0.0063	0.0028		0.0233
	Cost of Money		0.0189	0.0103	0.0233	0.0233	0.0103		0.0861
	Income Tax		0.0100	0.0051	0.0102	0.0100	0.0055		0.0408
	Maintenance		0.0066	0.0028	0.0100	0.0083	0.0033		0.031
	Ad Valorem Tax		0.0038	0.0007	0.0026	0.0016	0.0000		0.0087
	Total Weighted								
	Annual Charge Factors		0.0444	0.0217	0.0524	0.0495	0.0219		0.1899
E. AMERITECH WEIGHTED AVERAGE ANNUAL COSTS (A.5 * D.L)									
	Depreciation								0.02
	Cost of Money								0.09
	Income Tax								0.04
	Maintenance								0.03
	Ad Valorem Tax								0.01
	Total Annual Cost								0.19
	Ameritech Weighted	Average Monthly Cost							$0.02
F. FULLY DISTRIBUTED CHARGE FACTOR									1.58
G. MONTHLY FDC FLOOR SPACE COST (F * E)									$ 0.03

COBO

				ACOI			
				PRELIMINARY ENGINEERING - COBO			
				(Pre Construction)			
A	B	C	D	E	F		
				1996			
Work	Preparing	Travel	Total	Labor	Total		
Group	Estimate	Time	Time	Rate	NRC		
	(hour)	(hour)	(hour)	(per hour)			
			B+C		D*E		
Collocation							
Coordinator	7	2.63	9.63	$53.69	$ 517.03		
OSP Engr.	9	0.75	9.75	$46.77	$ 456.01		
Power							
Engineer	8	1.5	9.5	$53.69	$ 510.06		
CSPEC	7	2.42	9.42	$53.69	$ 505.76		
DTE	9	2.75	11.75	$53.69	$ 630.86		
Real							
Estate*	10	2	12	$85.00	$ 1,020.00		
			Total NRC:		$ 3,639.72		
		*Additional Real Estate Costs					
Asbestos Assessment					$991.00		
			Weighting:				
	Assessment / 8 X 65%				$80.52		
	Assessment / 4 X 25%				$61.94		
	Assessment / 2 X 10%				$49.55		
		Total Asbestos Assessment:(D)			$192.01		
			Total Preliminary:		$ 3,831.73		

COBO

			ACOI				
			PROJECT MGT. FEE - DESIGN FIRM ORDER (COBO)				
A	B	C	D	E	F	G	
Work Group	Admin. Time (hr)	Engr. Time (hr)	Travel Time (hr)	Total Time B+C+E	Labor Rate (per hr)	Total NRC E*F	
Collocation Coordinator	32	0	5.26	37.26	$53.69	$ 2,000.49	
OSP Engr.	14	8	1.5	23.5	$46.77	$ 1,099.10	
Power Engineer	14	6	3	23	$53.69	$ 1,234.87	
CSPEC	18	0	4.84	22.84	$53.69	$ 1,226.28	
DTE	14	8	5.5	27.5	$53.69	$ 1,476.48	
Real Estate*	0	28	4	32	$85.00	$ 2,720.00	
			Total NRC:			$ 9,757.22	
			*Additional Real Estate COBO Costs				
Consulting Engineer						$1,000.00	
Contracted Building Work Per 100SF (C)						$9,494.00	
			Total Firm Order:			$ 20,251.22	
			COBO COST SUMMARY				
Preliminary Engineering: (A)						$ 3,831.73	
Design Firm Order: (B)						$ 20,251.22	
		Total COBO Cost:(A+B)		(First 100 SF)		$24,082.95	
		Additional 100 SF: (C+D)				$9,686.01	

AMERITECH CENTRAL OFFICE INTERCONNECTION VAULT SPLICING (INITIAL) PER SPLICE

1	SPLICE CASE COST PER SPLICE	$1.44
2	SPLICE TRAY COST PER SPLICE	1.51
3	TOTAL MATERIAL COST (L1+L2)	2.95
4	LABOR HOURS PER SPLICE	3.63
5	INCREMENTAL LABOR RATE	32.92
6	LABOR COST PER SPLICE (L4*L5)	$119.32
7	TOTAL COST PER SPLICE (L3+L6)	$122.27

VAULT SPLICING (SUBSEQUENT) PER SPLICE

1	SPLICE CASE COST PER SPLICE	$1.44
2	SPLICE TRAY COST PER SPLICE	1.51
3	TOTAL MATERIAL COST (L1+L2)	2.95
4	LABOR HOURS PER SPLICE	0.20
5	INCREMENTAL LABOR RATE	32.92
6	LABOR COST PER SPLICE (L4*L5)	$6.58
7	TOTAL COST PER SPLICE (L3+L6)	$9.53

1	LABOR HOURS PER SPLICE	$0.85
2	INCREMENTAL LABOR RATE	32.92
3	LABOR COST PER SPLICE (L1*L2)	$27.98

SPLICE TEST (SUBSEQUENT) PER SPLICE

1	LABOR HOURS PER SPLICE	$0.05
2	INCREMENTAL LABOR RATE	32.92
3	LABOR COST PER SPLICE (L1*L2)	$1.65

AMERITECH CENTRAL OFFICE INTERCONNECTION
CABLE PULL (MANHOLE TO VAULT)
FIRST FOOT

1	LABOR HOURS PER PULL	4.02
2	INCREMENTAL LABOR RATE	$32.92
3	LABOR COST PER PULL FOR 1ST FT. (L1*L2)	$132.33

CABLE PULL (MANHOLE TO VAULT)
ADDITIONAL FOOT

1	LABOR HOURS PER PULL	0.02
2	INCREMENTAL LABOR RATE	$32.92
3	LABOR COST PER PULL FOR 1ST FT. (L1*L2)	$0.66

AMERITECH CENTRAL OFFICE INTERCONNECTION CABLE PULL (VAULT TO TRANSMISSION NODE) FIRST FOOT

1	LABOR HOURS PER PULL	1.50
2	INCREMENTAL LABOR RATE	$32.92
3	LABOR COST PER PULL FOR 1ST FT. (L1*L2)	$49.42

CABLE PULL (VAULT TO TRANSMISSION NODE) ADDITIONAL FOOT

1	LABOR HOURS PER PULL	.015 ~~0.02~~
2	INCREMENTAL LABOR RATE	$32.92
3	LABOR COST PER PULL FOR 1ST FT. (L1*L2)	$0.49

...BLE PULL (MANHOLE TO VAULT)

	HOURLY LABOR RATE	FIRST FOOT LABOR HOURS	FIRST FOOT COST PER PULL	ADDITIONAL PER FT. LABOR HOURS	ADDITIONAL PER FT. COST PER PULL
	(A)	(B)	C=A*B	(D)	E=A*D
ILLINOIS	32.05	4.02	128.84	0.02	0.64
INDIANA	32.09	4.02	129.00	0.02	0.64
MICHIGAN	35.62	4.02	143.19	0.02	0.71
OHIO	33.05	4.02	132.86	0.02	0.66
WISCONSIN	33.49	4.02	134.63	0.02	0.67
AMERITECH			132.33		0.66

CABLE PULL (VAULT TO CUST. SPACE)

	HOURLY LABOR RATE	FIRST ~~100~~ FT. LABOR HOURS	FIRST ~~100~~ FT. COST PER PULL	ADDITIONAL ~~100~~ FT. LABOR HOURS	ADDITIONAL ~~100~~ FT. COST PER PULL
	(A)	(B)	(C)	(D)	E=A*D
ILLINOIS	32.05	1.502	48.12	0.015	0.48
INDIANA	32.09	1.502	48.18	0.015	0.48
MICHIGAN	35.62	1.502	53.48	0.015	0.53
OHIO	33.05	1.502	49.62	0.015	0.50
WISCONSIN	33.49	1.502	50.29	0.015	0.50
AMERITECH			49.42		0.49

	FL SPACE	
ILLINOIS	23.00	0.40
INDIANA	10.00	0.17
MICHIGAN	9.00	0.16
OHIO	12.00	0.21
WISCONSIN	4.00	0.07
	58.00	

VAULT SPLICING (INITIAL) PER SPLICE

	SPLICE CASE COST PER SPLICE	SPLICE TRAY COST PER SPLICE	TOTAL MATERIAL INV. PER SPLICE	TPI	ADJUSTED TOTAL MATERIAL INV. PER SPLICE	LABOR HOURS PER SPLICE	HRLY LABOR RATE	LABOR COST PER SPLICE	TOTAL COST PER SPLICE
	(A)	(B)	C=A+B	(D)	E=C*D	(F)	(G)	H=F*G	I=(C*D)+(C*D*E)+H
ILLINOIS	1.51	1.59	3.11	0.9498	2.95	3.63	32.05	116.18	119.13
INDIANA	1.51	1.59	3.11	0.9498	2.95	3.63	32.09	116.33	119.28
MICHIGAN	1.51	1.59	3.11	0.9498	2.95	3.63	35.62	129.12	132.07
OHIO	1.51	1.59	3.11	0.9498	2.95	3.63	33.05	119.81	122.76
WISCONSIN	1.51	1.59	3.11	0.9498	2.95	3.63	33.49	121.40	124.35
AMERITECH							32.92		122.27

VAULT SPLICING (SUBSEQUENT)
PER SPLICE

	ADJUSTED TOTAL MATERIAL INV. PER SPLICE	LABOR HOURS PER SPLICE	HOURLY LABOR RATE	LABOR COST PER SPLICE
	(A)	(B)	(C)	D=A+B*C
ILLINOIS	2.95	0.20	32.05	9.36
INDIANA	2.95	0.20	32.09	9.37
MICHIGAN	2.95	0.20	35.62	10.07
OHIO	2.95	0.20	33.05	9.56
WISCONSIN	2.95	0.20	33.49	9.65
AMERITECH				9.53

	INITITAL			SUBSEQUENT	
	HOURS PER SPLICE TEST	HOURLY LABOR RATE	COST PER SPLICE TEST	LABOR HOURS PER SPLICE TEST	COST PER SPLICE TEST
	(A)	(B)	C=A*B	(A)	C=A*B
ILLINOIS	0.85	32.05	27.24	0.05	1.60
INDIANA	0.85	32.09	27.28	0.05	1.60
MICHIGAN	0.85	35.62	30.28	0.05	1.78
OHIO	0.85	33.05	28.09	0.05	1.65
WISCONSIN	0.85	33.49	28.47	0.05	1.67
AMERITECH			27.98		1.65

	FL SPACE	
ILLINOIS	23.00	0.40
INDIANA	10.00	0.17
MICHIGAN	9.00	0.16
OHIO	12.00	0.21
WISCONSIN	4.00	0.07
	58.00	

AMERITECH CENTRAL OFFICE INTERCONNECTION
RISER SPACE
Per Foot

TOTAL INVESTMENT	$60.58
RECURRING COSTS	
Depreciation	$1.41
Cost of Money	$5.22
Income Tax	$2.47
Maintenance	$1.88
Ad Valorem Tax	$0.53
Total Annual Cost	$11.51
Monthly Cost	$0.96
Gross Receipts Tax	$0.04
Total Monthly Cost	$1.00
Riser Space Monthly Rate	$1.58
Direct Unit Cost to Unit Investment Ratio	0.02
Direct Unit Cost to Unit Price Ratio	0.63

Item:	er Space							
Acct:	10C							
A. INVESTMENT								
1	1993 Investment		$55.73					
2	1996 TPI Index		127.3					
3	1993 TPI Index		117.1					
4	TPI Factor	(L2 / L3)	1.0871					
5	1996 Investment	(L1 * L4)	**$60.58**					
			IL	IN	MI	OH	WI	
B. ANNUAL CHARGE FACTORS								
	Depreciation		0.0233	0.0233	0.0233	0.0233	0.0233	
	Cost of Money		0.0859	0.0861	0.0863	0.0863	0.0859	
	Income Tax		0.0454	0.0421	0.0376	0.0372	0.0461	
	Maintenance		0.0298	0.0231	0.0372	0.0307	0.0273	
	Ad Valorem Tax		0.0171	0.0057	0.0097	0.0059	0.0000	
C. JURISDICTION WEIGHTING			0.22	0.12	0.27	0.27	0.12	Ameritech
								Weighted
D. WEIGHTED ANNUAL CHARGE FACTORS								Average
	Depreciation		0.0051	0.0028	0.0063	0.0063	0.0028	0.0233
	Cost of Money		0.0189	0.0103	0.0233	0.0233	0.0103	0.0861
	Income Tax		0.0100	0.0051	0.0102	0.0100	0.0055	0.0408
	Maintenance		0.0066	0.0028	0.0100	0.0083	0.0033	0.031
	Ad Valorem Tax		0.0038	0.0007	0.0026	0.0016	0.0000	0.0087
	Total Weighted Annual Charge Factors		0.0444	0.0217	0.0524	0.0495	0.0219	0.1899
E. AMERITECH WEIGHTED AVERAGE ANNUAL COSTS		(A.5 * D.L)						
	Depreciation							1.41
	Cost of Money							5.22
	Income Tax							2.47
	Maintenance							1.88
	Ad Valorem Tax							0.53
	Total Annual Cost							11.51
	Ameritech Weighted	Average Monthly Cost						$0.96
F	**COST to RATE FACTOR**							1.65
G. MONTHLY RISER SPACE COST Per Foot (		(F*E)						$ 1.58

DEVELOPMENT OF RISER COSTS FOR PHYSICAL INTERCONNECTION WP-3

		INVESTMENT DEVELOPMENT (A)	ANNUAL CHARGE FACTORS (B)	ANNUAL COSTS C=A*B
1	INVESTMENT IN RISER SPACE (SOURCE: VENDOR ESTIMATES)	$4,000		
2	CABLES PER RISER SPACE	160		
3	RISER INV. PER CABLE (L1/L2)	$25		
4	AVG DISTANCE PER FLOOR (FEET)	15		
5	AVERAGE NO. OF FLOORS	3		
6	RISER INV. PER FT. (L3/(L4*L5))	$0.56		
7	RACKING INVESTMENT PER FOOT	$80		
8	AVG. NO. CUSTOMERS PER C.O.	1.45		
9	RACKING INV PER FT. PER CUST. (L7/L8)	$55.17		
10	TOTAL INVESTMENT PER FT. (L6+L9)	$55.73		
11	TELEPHONE PLANT INDEX FACTOR (TPI)	0.99		
12	1993 ADJUSTED TOTAL INV. PER FT. (L11*L12)	$55.17		
13	COST OF MONEY		0.046243	$2.55
14	INCOME TAX		0.018188	1.00
15	DEPRECIATION EXPENSE		0.167100	9.22
16	MAINTENANCE EXPENSE		0.015345	0.85
17	AD VALOREM TAX		0.009030	0.50
18	GROSS RECEIPTS TAX ((L13C THRU L17C)*L18B)		0.013458	0.19
19	TOTAL ANNUAL COSTS PER FT. (L13 THRU L18)			14.30
20	TOTAL MONTHLY COST PER FT. (L19/12)			1.19

NOTE: RACKING INV. OF $80.00/FT. CONSISTS OF:

ENGINEERING COST:	$20.00/FT	SOURCE:VENDOR ESTIMATES
INSTALLATION COST:	$40.00/FT	SOURCE:VENDOR ESTIMATES
MATERIAL COST:	$20.00/FT	SOURCE:VENDOR ESTIMATES

AMERITECH CENTRAL OFFICE INTERCONNECTION
ENTRANCE FACILITY
Per Innerduct Foot

TOTAL INVESTMENT	**$4.21**
RECURRING COSTS	
Depreciation	$0.08
Cost of Money	$0.33
Income Tax	$0.16
Maintenance	$0.02
Ad Valorem Tax	$0.03
Total Annual Cost	**$0.62**
Monthly Cost	**$0.05**
Gross Receipts Tax	**$0.00**
Total Monthly Cost	**$0.05**
Entrance Facility Monthly Rate	**$0.08**
Direct Unit Cost to Unit Investment Ratio	**0.01**
Direct Unit Cost to Unit Price Ratio	**0.63**

Item:	Entrance Conduit - Per innerduct foot						
Acct:	4C						
A. INVESTMENT							
		IL	IN	MI	OH	WI	
1	1993 Investment	$3.76	$3.76	$3.76	$3.76	$3.76	
2	1996 TPI Index	119	119	119	119	119	
3	1993 TPI Index	106.3	106.3	106.3	106.3	106.3	
4	TPI Factor (L2 / L3)	1.1195	1.1195	1.1195	1.1195	1.1195	
5	1996 Investment (L1 * L4)	**$4.21**	**$4.21**	**$4.21**	**$4.21**	**$4.21**	
		IL	IN	MI	OH	WI	
B. ANNUAL CHARGE FACTORS							
	Depreciation	0.0200	0.0200	0.0200	0.0200	0.0200	
	Cost of Money	0.0769	0.0776	0.0785	0.0786	0.0768	
	Income Tax	0.0406	0.0379	0.0342	0.0339	0.0412	
	Maintenance	0.0066	0.0052	0.0022	0.0051	0.0051	
	Ad Valorem Tax	0.0025	0.0066	0.0097	0.0192	0.0000	
C. ANNUAL COSTS (A * B)							
	Depreciation	0.08	0.08	0.08	0.08	0.08	
	Cost of Money	0.32	0.33	0.33	0.33	0.32	
	Income Tax	0.17	0.16	0.14	0.14	0.17	
	Maintenance	0.03	0.02	0.01	0.02	0.02	
	Ad Valorem Tax	0.01	0.03	0.04	0.08	0.00	
D. JURISDICTION WEIGHTING		0.22	0.12	0.27	0.27	0.12	
E. WEIGHTED ANNUAL COSTS (C * D)							Ameritech Weighted Average
		IL	IN	MI	OH	WI	
	Depreciation	0.02	0.01	0.02	0.02	0.01	**$0.08**
	Cost of Money	0.07	0.04	0.09	0.09	0.04	**$0.33**
	Income Tax	0.04	0.02	0.04	0.04	0.02	**$0.16**
	Maintenance	0.01	0.00	0.00	0.01	0.00	**$0.02**
	Ad Valorem Tax	0.00	0.00	0.01	0.02	0.00	**$0.03**
	Total Annual Cost	0.14	0.07	0.16	0.18	0.07	**$0.62**
	Ameritech Weighted Average Monthly Cost						**$0.05**
F	**COST to RATE FACTOR**						**1.65**
G. MONTHLY ENTRANCE CONDUIT COST		(F*E)					**$ 0.08**

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AMERITECH CENTRAL OFFICE INTERCONNECTION ENTRANCE CONDUIT - PER INNERDUCT FT.

TOTAL INVESTMENT	$3.76
COST OF MONEY	0.28
INCOME TAX	0.11
DEPRECIATION EXPENSE	0.06
MAINTENANCE EXPENSE	0.02
AD VALOREM TAX	0.03
GROSS RECEIPTS TAX	0.01
ANNUAL COST PER INNERDUCT FT.	0.51
MONTHLY COST PER INNERDUCT FT.	0.04

Trans. 697
Reply C...

DEVELOPMENT OF NEW CONDUIT COSTS

WP-5

	ILLINOIS	INDIANA	MICHIGAN	OHIO	WISCONSIN	AMERITECH
1 NEW CONDUIT INV	$3.46	$4.01	$3.59	$4.00	$3.04	$3.65
2 TEL PLT INDEX	1.03	1.03	1.03	1.03	1.03	1.03
3 ADJ 1993 NEW CONDUIT INV (L1*L2)	$3.56	$4.13	$3.70	$4.12	$3.13	$3.76
4 AMERITECH WEIGHTING FACTORS	0.20	0.22	0.20	0.22	0.17	1.00
5 WEIGHTED 1993 NEW CONDUIT INV (L3*L4)	$0.70	$0.89	$0.73	$0.91	$0.52	$3.76
6 COST OF MONEY (L5*L6A)						$0.28
6A ANNUAL CHARGE FACTOR						0.076011
7 INCOME TAX (L5*L7A)						$0.11
7A ANNUAL CHARGE FACTOR						0.029273
8 DEPRECIATION EXP (L5*L8A)						$0.06
8A ANNUAL CHARGE FACTOR						0.015384
9 MAINTENANCE EXP (L5*L9A)						$0.02
9A ANNUAL CHARGE FACTOR						0.005406
10 AD VALOREM TAX (L5*L10A)						$0.03
10A ANNUAL CHARGE FACTOR						0.008566
11 GROSS RECEIPTS TAX ((L6 THRU L10)*L11A)						$0.01
11A ANNUAL CHARGE FACTOR						0.014727
12 ANNUAL COSTS FOR NEW CONDUIT (L6 THRU L11)						$0.51
13 MONTHLY NEW CONDUIT COSTS PER INNER DUCT FT. (L12/12)						$0.04

Trans. 8

EXHIBIT 3

AMERITECH VIRTUAL INTERCONNECTION
POWER CONSUMPTION
PER FUSE AMP

RECURRING COSTS

1 VOLTAGE DIRECT CURRENT (VDC) PER FUSE AMP	0.0521
2 ESTIMATED ANNUAL KILOWATT HOURS (KWH)	8,760
3 AVERAGE COST PER KWH	$0.10
4 BASIC DC POWER COST (L1*L2*L3)	$45.62
5 INCREMENTAL AIR CONDITIONER POWER COST	$15.06
6 TOTAL ANNUAL DC POWER COST PER FUSE AMP (L4+L5)	$60.68
7 TOTAL MONTHLY DC POWER COST PER FUSE AMP (L6/12)	$5.06
8 TOTAL COST (L7*1.58 FDC FAC . OR) = RATE	$7.99

The costs for the electrical energy used should be based on the fuse size and the number of circuits required. It is my understanding that a typical interconnector will require 2 - 20 Ampere, -48 Volt DC circuits per bay. Using the fuse size rather than the circuit capacity will compensate for the power equipment efficiencies, additional demand charges, as well as, the seasonally adjusted electric company rates. The cost of the electricity for 1 - 20 Ampere circuit would be figured as follows:

20 Amperes X 52.08 VDC = 1.0416KW/20 = 0.0521
1.0416KW X *$0.10 (cost per KWhr) X 24 (Hours per day) X 365 (Days per year) = $912.44 per year per circuit

*This cost may vary by electrical utility.

Therefore, when an interconnector requires 2 - 20 Ampere, -48 Volt circuits their cost would be $1,824.88 (2 X $912.44).

Please let me know if you need any additional information. I will provide you with a sketch which will show how the costs are broken down in order to prepare a space for an interconnector.

Tony Leifel

INTEROFFICE MEMORANDUM

Date: 05-Feb-1993 03:19pm CST
From: MICHAEL R. LANG
LANG,MICHAEL
Dept: Human Resources & Admin
Tel No: (708) 248-6953

TO: Michael D. Silver (SILVER,MICHAEL)

CC: GERALD PADDOCK (PR_U=PRF1210@PR_L=MBT5@MRP@ANTNI)

Subject: Collocation-Air conditioning load

Mike

There is a provision for standard electrical power in the "house service" floor space charge. However, it will not increase as cooling loads increase. Therefore, it is logical to tie this added expense to the amount of power requested. The amount of air conditioning and air flow required for the customer's equipment will increase proportionately with the amount of DC circuits provided. The cost per 20 amp circuit is calculated as follows:

1.0416KW (20 amp x 52.08v DC)
x 8760 Hrs/yr
x 0.33 Coefficient of performance
x $.10/Kwh

$301.11 per year per circuit

÷ 20 = 15.06 ← 1993

Mike

VIRTUAL INTERCONNECTION COST SUPPORT
POWER BDFB INFRASTRUCTURE

LARGE OFCS. SECONDARY INFRASTRUCTURE	TOTAL INSTALLED COST
SECONDARY BDFB	$9,575.07
60' OF SECONDARY CABLE RACK W/SUPPORT	$7,846.00
100' OF NO. 1/0 CABLE FOR GROUNDING	$996.00
GROUNDING CABLE RACK	$2,015.00
TOTAL	$20,432.07
(@90% OF LAR. SIZE OFFICES THAT HAVE THIS ARRANGEMENT)	$18,388.86
MEDIUM OFCS. SECONDARY INFRASTRUCTURE	
SECONDARY BDFB	$7,349.07
40' OF SECONDARY CABLE RACK W/SUPPORT	$5,210.00
100' OF NO. 1/0 CABLE FOR GROUNDING	$996.00
GROUNDING CABLE RACK	$2,036.00
TOTAL	$15,591.07
(@10% OF MED. SIZE OFFICES THAT HAVE THIS ARRANGEMENT)	$1,559.11
TOTAL LARGE OFCS	$18,388.86
TOTAL MEDIUM OFCS	$1,559.11
GRAND TOTAL	$19,947.97
MAXIMUM NUMBER OF FUSE POSITIONS IN BDFB IS 200	
GRAND TOTAL /200 FUSE POSITIONS = PER FUSE POSITION	$99.74
FUSE POSITION x 2 =	$199.48
ADDITIONAL 2ND POWER CABLE REQ. FOR EACH FUSE POS. A&B LOAD	$1,021.00
TOTAL NON-RECURING COST	$1,220.48
FDC FACTOR =	1.58
TOTAL NON-RECURRING CHARGE FOR 2-FUSE POSITIONS & ASSOCIATED CABLE	$1,928.36

VIRTUAL INTERCONNECTION COST SUPPORT
POWER BDFB INFRASTRUCTURE
SUMMARY

	TOTAL INSTALLED COST
SECONDARY INFRASTRUCTURE INCLUDES:	
SECONDARY BDFB SECONDARY CABLE RACK W/SUPPORT 100' OF NO. 1/0 CABLE FOR GROUNDING GROUNDING CABLE RACK	
TOTAL COST	$19,947.97
GRAND TOTAL /200 FUSE POSITIONS = PER FUSE POSITION	$99.74
FUSE POSITION x 2 =	$199.48
ADDITIONAL 2ND POWER CABLE REQ. FOR EACH FUSE POS. A&B LOAD	$1,021.00
TOTAL NON-RECURRING COST	$1,220.48
FDC FACTOR =	1.58
TOTAL NON-RECURRING CHARGE FOR 2-FUSE POSITIONS & ASSOCIATED CABLE	$1,928.36

200 CONDUCTOR ELECTRICAL CROSS CONNECTION BLOCK

INVESTMENT	$2,505.02
DEPRECIATION	$271.11
COST OF MONEY	$157.86
INCOME TAX	$66.93
MAINTENANCE	$170.20
AD VALOREM TAX	$17.09
TOTAL ANNUAL COST	$683.18
TOTAL MONTHLY COST	$56.93
OVERHEAD FACTOR	1.58
TOTAL MONTHLY COST PER CROSS-CONNECTION BLOCK	**$89.95**

CROSS CONNECT SERVICE 2-WIRE XCONN.

INVESTMENT	$5.93
DEPRECIATION	$0.64
COST OF MONEY	$0.37
INCOME TAX	$0.16
MAINTENANCE	$0.40
AD VALOREM TAX	$0.04
TOTAL ANNUAL COST	$1.61
TOTAL MONTHLY COST	$0.13
OVERHEAD FACTOR	1.58
TOTAL MONTHLY COST PER 2-WIRE X-CONN	**$0.21**

	AT&T List		Discounted	
	Material	E,F&I	E,F&I	% of Total
MDF	3.3130	3.5193	2.8567	0.235263
MDF Conector Block	4.3860	5.1930	4.3158	0.355427
Tie Cable	2.1053	5.3684	4.9473	0.407437
Power Distribution Frame	0.0263	0.0280	0.0227	0.001873
Total	9.8306	14.1087	12.1426	
SCIS/IN 1.6				
MDF less Protector =	9.8305	14.1087	12.1426	0.691106
Protector =	2.5379	5.9348	5.4272	0.308894
			17.5698	

Line Fill = 97%	MDF less Protector =	***12.5181***	✓ X 200 = ←
Line Fill = 97%	MDF with Protector =	***18.1132***	

$2504
Invest.